

Ordering Information

Part Number	Ambient Temperature Range	Package	Environmental
AOZ8831DT-03	-40°C to +85°C	DFN 1.0 x 0.6	Green Product



AOS Green Products use reduced levels of Halogens, and are also RoHS compliant. Please visit www.aosmd.com/media/AOSGreenPolicy.pdf for additional information

Absolute Maximum Ratings

Exceeding the Absolute Maximum ratings may damage the device.

Parameter	Rating
VP – VN	3.6V
Peak Pulse Current (I_{PP}), $t_P = 8/20\mu s$	6A
Peak Pulse Power (IEC61000-4-5 8/20 μs current pulse)	90W
Storage Temperature (T_S)	-65°C to +150°C
ESD Rating per IEC61000-4-2, Contact ⁽¹⁾	±20kV
ESD Rating per IEC61000-4-2, Air ⁽¹⁾	±20kV
ESD Rating per Human Body Model ⁽²⁾	±15kV

Notes:

- IEC 61000-4-2 discharge with $C_{Discharge} = 150pF$, $R_{Discharge} = 330\Omega$.
- Human Body Discharge per MIL-STD-883, Method 3015 $C_{Discharge} = 100pF$, $R_{Discharge} = 1.5k\Omega$.

Maximum Operating Ratings

Parameter	Rating
Junction Temperature (T_J)	-40°C to +125°C

Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise specified.

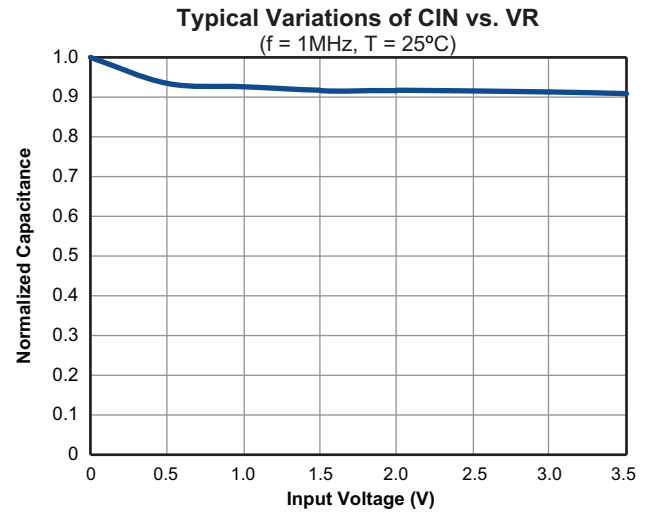
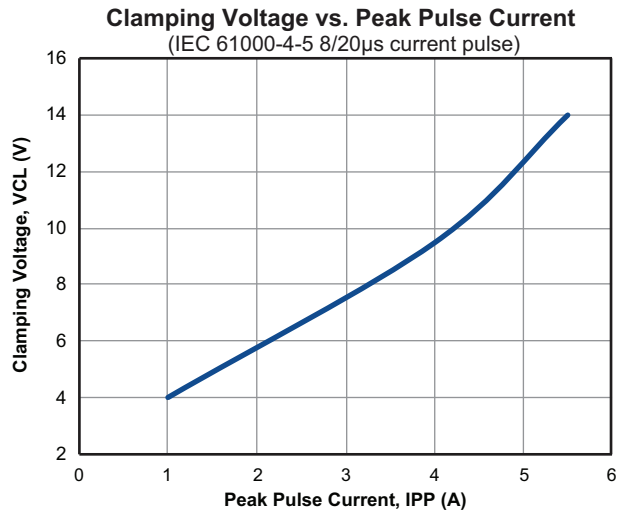
Symbol	Parameter	Diagram
I_{PP}	Maximum Reverse Peak Pulse Current ⁽³⁾ (IEC61000-4-5 8/20 μs pulse)	
V_{CL}	Clamping Voltage @ I_{PP} ⁽³⁾	
V_{RWM}	Working Peak Reverse Voltage	
I_R	Maximum Reverse Leakage Current	
V_{BR}	Breakdown Voltage	
C_J	Capacitance @ $V_R = 0$ and $f = 1\text{MHz}$	

Device	Device Marking	V_{RWM} (V) Max.	V_{BR} (V)		I_R (μA) Max.	V_{CL} Max.			C_J (pF)	
			Min.	Max.		$I_{PP} = 1\text{ A}$	$I_{PP} = 4\text{ A}$	$I_{PP} = 6\text{ A}$	Typ.	Max.
AOZ8831DT-03	4	3.6	4.5	10	0.1	4	9.5	15	0.22	0.35

Notes:

3. These specifications are guaranteed by design and characterization.

Performance Characteristics



LEGAL DISCLAIMER

Applications or uses as critical components in life support devices or systems are not authorized. AOS does not assume any liability arising out of such applications or uses of its products. AOS reserves the right to make changes to product specifications without notice. It is the responsibility of the customer to evaluate suitability of the product for their intended application. Customer shall comply with applicable legal requirements, including all applicable export control rules, regulations and limitations.

AOS' products are provided subject to AOS' terms and conditions of sale which are set forth at:

http://www.aosmd.com/terms_and_conditions_of_sale

LIFE SUPPORT POLICY

ALPHA AND OMEGA SEMICONDUCTOR PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS.

As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
2. A critical component in any component of a life support, device, or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.